

IEEE Std 100-1996

The IEEE Standard
Definitions of the Terms
and Abbreviations Used

Sixth Edition



Approved by the
Institute of Electrical and
Electronic Engineers, Inc.

- and sleeping, and permanent provisions for cooking and sanitation. (NEC/NESC) [86]
- dyadic (mathematics of computing)** Pertaining to an operation involving two operands. *Contrast:* monadic. (C) 1084-1986w
- dyadic Boolean operation** A logical operation involving two operands. For example, the equivalence operation. *Contrast:* monadic Boolean operation. (C) 1084-1986w
- dyadic operation** An operation involving two operands. *Contrast:* monadic operation. (C) 1084-1986w
- dyadic operator** An operator that specifies an operation on two operands. *Synonym:* binary operator. *Contrast:* monadic operator. (C) 1084-1986w
- dyadic selective construct** An if-then-else construct in which processing is specified for both outcomes of the branch. *Contrast:* monadic selective construct. (C) 610.12-1990
- dynamic (1) (excitation systems)** A state in which one or more quantities exhibit appreciable change within an arbitrarily short time interval. *Note:* For excitation control systems, this time interval encompasses up to 15-20 sec.; that is, sufficient time to ascertain whether oscillations are decaying or building up with time. *See also:* control system, feedback. (PE) 421A-1978s
- (2) (software)** Pertaining to an event or process that occurs during computer program execution; for example, dynamic analysis, dynamic binding. *Contrast:* static. (C) 610.12-1990
- dynamic accuracy** Accuracy determined with a time-varying output. *Contrast:* static accuracy. *See also:* electronic analog computer. (BT/C) 165-1977w, 185-1975w
- dynamic allocation** *See:* dynamic resource allocation.
- dynamically programmable logic gate** A gate in a field programmable gate array, the function of which can be changed while it is in the circuit. *Note:* This is a function that is available in some RAM-based field programmable gate arrays. (C) 610.10-1994
- dynamically tuned gyro (DTG) (inertial sensors)** A two-degree-of-freedom gyro in which a dynamically tuned flexure and gimbal mechanism both supports the rotor and provides angular freedom about axes perpendicular to the spin axis. *See also:* dynamic tuning. (AE) 528-1994
- dynamic analysis (software)** The process of evaluating a system or component based on its behavior during execution. *Contrast:* static analysis. *See also:* demonstration; testing. (C) 610.12-1990
- dynamic analyzer (software)** A software tool that aids in the evaluation of a computer program by monitoring execution of the program. Examples include instrumentation tools, software monitors, and tracers. *See also:* computer program; execution; program; software monitor; static analyzer; tracer. (C/SE) 729-1983s
- dynamic binding (software)** Binding performed during the execution of a computer program. *Contrast:* static binding. (C) 610.12-1990
- dynamic braking (rotating machinery)** A system of electric braking in which the excited machine is disconnected from the supply system and connected as a generator, the energy being dissipated in the winding and, if necessary, in a separate resistor. (PE) [9]
- dynamic braking envelope** A curve that defines the dynamic braking limits in terms of speed and tractive force as restricted execution, based on current need. *Contrast:* simple buffering. (C) 610.12-1990
- (2) Buffering** in which buffer storage is allocated in the sizes and at the times as required by an application. (C) 610.10-1994
- dynamic bus sizing** The ability of some microprocessors to adjust the number and the size of data transfers to the amount of data that the responding board can access in one transfer. During the address broadcast portion of the cycle, the slave informs the master how many data lines it actually drives or receives. This information is made available to on-board logic that can then adjust the amount of data that it access during the data transfer to the capabilities of the slave. (C/MM) 1096-1988
- dynamic characteristic** *See:* load characteristic.
- dynamic check** *See:* problem check.
- dynamic computer check** *See:* problem check.
- dynamic configuration (DC)** An optional, alternative method of automatically assigning logical addresses to VXibus devices at system power-on or other configuration times, using the MODID lines. It allows for each slot to contain one or more devices as well as different devices within a slot to share address decoding hardware. (C/MM) 1155-1992
- dynamic cutoff frequency (nonlinear, active, and nonreciprocal waveguide components) (semiconductor)** A figure of merit used for varactor diodes. Unlike fixed cutoff frequency measurements at specific bias voltages, dynamic cutoff frequency is a measure of the varactor's total change in Q from a slight forward bias current to reverse breakdown voltage. This dynamic or total figure of merit is useful in evaluating the frequency multiplier performance of fully driven multipliers. (MTT) 457-1982w
- dynamic dump** A dump that is produced during the execution of a computer program. *Contrast:* static dump. *See also:* change dump; memory dump; postmortem dump; selective dump; snapshot dump. (C) 610.12-1990
- dynamic dumping (test, measurement, and diagnostic equipment)** The printing of diagnostic information without stopping the program being tested. (MIL) [2]
- dynamic electrode potential** An electrode potential when current is passing between the electrode and the electrolyte. *See also:* electrochemistry. (EEC/PE) [119]
- dynamic energy sensitivity** *See:* sensitivity, dynamic.
- dynamic error (1) (analog computer)** An error in a time-varying signal resulting from imperfect dynamic response of a transducer. (C) 165-1977w
- (2) (software)** An error that is dependent on the time-varying nature of an input. *Contrast:* static error. (C) 610.12-1990
- dynamic holding brake** A braking system designed for the purpose of exerting maximum braking force at a fixed speed only and used primarily to assist in maintaining this fixed speed when a train is descending a grade, but not to effect a deceleration. *See also:* dynamic braking. (EEC/PE) [119]
- dynamic impedance (low voltage varistor surge arresters)** A measure of small signal impedance at a given operating point, described as the rate of change of varistor voltage with respect to varistor current at the operating point. (PE) [8]
- dynamicizer** *See:* serializer.
- dynamic load line** The locus of all simultaneous values of total